

**CHARACTERISTIC OF ABSORPTION AND METABOLISM
OF Fe, Zn, Ca IONS, METHIONINE, VITAMIN B₁₂
UNDER DIFFERENT TYPES OF VEGETARIAN NUTRITION**

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Introduction. What must feel true vegetarians and vegans, which do not eat food animal origin? Is justify for the organism this victim? Vegetarianism stir up many questions and disputes

Aim. To study the peculiarities of the metabolism of Fe, Zn, Ca ions, methionine, vitamin B₁₂ under different types of vegetarian nutrition using the analysis of modern literature.

Results and discussion. The iron exists in two forms necessary for our organism: heme and non-heme. Most of all heme iron contains in meat-and-milk products and assimilates for 15-35 %. Non-heme iron is mainly assimilated from vegetable products. It absorbed by our organism for 5-20%, that depends on the presence of vitamin C. Features of metabolism of Zinc is low adsorption from vegetable products. The reason is the formation of insoluble compounds with phytic acid, which is present in the main products of vegans – cereal, bean nuts, seeds and some root crops. Calcium is better absorbed from milk food, which rich by lactose. Foods containing oxalates (tea, herbs), salts of phytic acid (legumes, grains, nuts) and food with a large amount of cellulose reduces the absorption of calcium. Also absorption of calcium is affected by the protein content in the diet: the high protein content in the food contributes to absorption of calcium by 10% more than low protein content. Animals' proteins consist of essential amino acids, so they are qualitative and full-fledged source of energy. Soy is the most full in amino acid composition, but even it hasn't got an essential amino acid – methionine, which is found in meat products. The alternative can be eggs and milk.

The Vitamin B₁₂ take part in hemopoiesis, formation of the myelin sheath of nerve fibers, prevention of adipose degeneration of the liver, kidneys, spleen, heart and other organs and provides the normal functioning of the body. In plant products B₁₂ contains in very small amounts, which leads to the development of hypovitaminosis. In milk its amount is 1.95 µg/100 g.

Conclusion. Features of absorption and metabolism of Fe, Zn, Ca ions, methionine and vitamin B₁₂ in rigid vegetarian diet leads to the development of their deficit. The most favorable for the assimilation and metabolism this substances is the lacto-ovo-veggie type of nutrition.